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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,438	07/02/1999	SHAI MOHABAN	50325-074	3850

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EXAMINER
BURGESS, BARBARA N

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/347,438	MOHABAN ET AL.	
	Examiner	Art Unit	
	Barbara N Burgess	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *02 July 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2, 6-9, 14-16, 20-22, 24, 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin.

As per claims 1, 20, 21, Martin discloses a method of selectively establishing a quality of service value for a network device, comprising the steps of:

- Receiving application information that defines one or more traffic flows generated by an application program, including information identifying one or more points at which an application generates the traffic flows (column 2, lines 14-17, 46-47, column 3, lines 34-35, 48-49, 57-59, column 4, lines 37-38, column 9, lines 65-67, column 10, lines 1-2);

- Receiving device information that defines one of more quality of service treatments that the network device may apply to data processed by the network device (column 2, lines 7-13, column 7, lines 19-21, 27-30);
- Based on the device information and the application information, determining one or more processing policies that associate the traffic flows with the quality of service treatments (column 2, lines 17-20, column 3, lines 32-45, 65-67, column 4, lines 1, 29-32, 55-60, column 7, lines 55-59, column 8, lines 54-57, column 9, lines 65-67, column 10, lines 1-2);
- Creating and storing one or more mappings of the application information to the quality of service treatments that may be used to generate the quality of service value when the application program generates traffic flows (column 3, lines 55-56, column 4, lines 20-25, 64-67, column 5, lines 5-7, column 8, lines 38-40, 47-50, column 10, lines 3-5, 34-35, 40-46, column 13, lines 50-53).

As per claim 2 and 22, Martin discloses:

- Storing the mappings in a repository that is accessible by the application program (column 4, lines 57-60, 64-67, column 5, lines 5-7, column 10, lines 18-24, column 13, lines 42-48);
- Converting the mappings into one or more settings of the network device (column 2, lines 14-20, column 3, lines 44-45, 50-51, column 4, lines 29-31);
- Enforcing one of the processing policies at the network device in response to receiving traffic from the application program that matches the traffic flow type (column 10, lines 3-6, column 11, lines 23-25).

As per claims 6, 7, and 24, Martin discloses:

- Creating and storing one or more mappings comprises creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in the repository (column 3, lines 55-56, column 4, lines 20-25, 29-32, 64-67, column 5, lines 5-7)

As per claim 8, Martin discloses:

- Creating and storing one or more mappings comprises creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in a directory (column 3, lines 55-56, column 4, lines 20-25, 29-32, 64-67, column 5, lines 5-7, column 7, lines 6-10).

As per claims 9 and 25, Martin discloses:

- Creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in a policy server coupled to Lightweight Directory Access Protocol directory that comprises the repository (column 6, lines 12-14).

As per claims 14, 15, and 27, Martin discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository (as shown in the rejection of claims 1, 6, and 8) and a policy defines actions to be applied to a flow and also identifies to whom the actions are to be applied (column 8, lines 55-57, column 9, lines 49-51).

Therefore, Martin implicitly discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository, wherein each policy statement associates a condition of one of the traffic flows, an operator, an operand, and an action comprising one of the quality of service treatments.

As per claims 16 and 28, Martin discloses determining one or more processing policies comprises creating and storing one or more policy statements in a directory (as shown in the rejections of claims 1, 6, and 8), wherein an entity can define mappings between one or more flow parameters, entities and quality of service identifiers and quality of service identifiers and quality of service definitions which contain rules. The rules or policies defines actions to be applied to a flow and also identifies to whom the actions are to be applied. These mappings are stored in a directory service (column 4, lines 56-60, 64-67, column 8, lines 38-40, 47-50, 55-57).

Therefore, Martin implicitly discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository, wherein each statement is represented by a plurality of nodes that represent a condition of one of the traffic flows, an operator and an action comprising one of the quality of service treatments, and wherein the plurality of nodes is coupled to a root node having a distinguished name in the directory.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-5, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Chapman et al. (hereinafter "Chapman", 6,028,842).

As per claims 3 and 23, Martin does not explicitly disclose creating and storing one or more classes that classify the traffic flows, each of the classes comprising one or more types of traffic flows and based on the traffic flows, determining one or more processing policies that associate the traffic flows with the quality of service treatments. However, the use and advantages for classifying traffic flows is well known to one skilled in the relevant art at the time the invention was made as evidenced my the teachings of Chapman (column 1, lines 33-34, column 2, lines 1-3, 6-7, 27-28, 40-43, 50-53).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate classifying traffic flows in Martin's method allowing administrative policies to give, for instance, certain groups different treatment that other groups.

As per claims 4 and 5, Martin does not explicitly disclose receiving application information comprises receiving one or more application code points that represent traffic flow types. However, the use and advantages for using application code points to represent traffic flow types is well known to one skilled in the relevant art at the time the invention was made as evidenced by Chapman (column 3, lines 46-48, 51-55, 63, 65-66, column 4, lines 3-5, 8-10, 12-14, 19-22, 29-31).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate application code points in Martin's method order to allocate bandwidth and implement an admission control policy for classes before delivering a packet.

5. Claims 10, 17, and 26 are rejected under 35 U.S.C. 103(a) as being upatentable over Martin in view of Chapman in further view of Haddock et al. (hereinafter "Haddock", 6,104,700).

As per claims 10, 17, and 26, Martin, in view of Chapman, does not explicitly disclose creating and storing one or more mappings further comprises creating and storing, in the repository, one or more mappings of Application Code Points of the application program to one or more Differential Services Code Points of a protocol associated with the network device. However, in an analogous art, Haddock discloses giving traffic groups with a higher priority (Differential Services Code Points) preference over those with lower priorities (column 8, lines 36-55).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Differential Services Code Points in Martin's, in view of Chapman, method allowing the relative importance of a particular traffic group to be defined.

6. Claims 11-13, and 19 are rejected under 35 U.S.C. 103(a) as being upatentable over Martin in view of Haddock et al. (hereinafter, "Haddock", 6,104,700).

As per claim 11, Martin does not explicitly disclose creating and storing one or more mappings further comprises generating one or more messages in RSVP+ () and communicating the messages to the network device. However, the use and advantages for generating messages in RSVP is well known to one skilled in the relevant art at the time the invention was made as evidenced by Haddock (column 1, lines 33-40, 51-55).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate generating messages in RSVP+ in order for end-stations to request and reserve resources within and across networks.

As per claims 12 and 13, Martin does not explicitly disclose receiving application information comprises receiving application information that defines one or more traffic flows generated by an application program, including information identifying one or more points at which an application generates the traffic flows, from a first and second individual having responsibility for managing enterprise applications in the network. However, in an analogous art, Haddock discloses control over bandwidth allocation and traffic priority is in the hands of network managers (column 2, lines 24-26, column 6, lines 32-35, 42-44, column 9, lines 28-29).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a first and second individual having responsibility for managing enterprise applications in the network in Martin's method allowing a centralized

control over bandwidth allocation and traffic priority to allow for quality of service without having to upgrade or alter end-stations and existing routers as typically required.

As per claim 19, Martin discloses this claim in accordance to the rejections made in claims 1, 2, 6, and 8. Martin does not explicitly disclose instructing the network device to apply Differentiated Services quality of service treatment in response to receiving traffic from the application program that matches the traffic flows. However, in an analogous art, Haddock discloses giving traffic groups with a higher priority preference over those with lower priorities (Differential Services) (column 8, lines 36-55).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Differential Services in Martin's method allowing the relative importance of a particular traffic group to be defined.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of McCloghrie et al. (hereinafter, "McClogherie", 6,286,052).

Martin does not explicitly disclose requesting an operating system function to modify a packet of the traffic flows using a policy element that requests a different operating system function according to the operating system then in use and at the network device, in response to receiving traffic from the application program that matches the traffic flow type and in response to the operating system function, modifying the packet to activate a quality of service treatment

of the network device. However, in an analogous art, McCloghrie discloses an operating system that is utilized for traffic management services, such as classifying packets (column 20, lines 19-40).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an operating system for modifying packets to activate a quality of service treatment in Martin's method in order for the packets to be sent across the network according to the quality of service needed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,430,154 B1;

U.S. Patent No. 5,970,064

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Barbara N Burgess
Examiner
Art Unit 2153

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September 23, 2002

ARIO ETIENNE
PRIMARY EXAMINER